

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A, 1/00  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete if Known</b>		
Sheet	1	of	2	Application Number	10/536,570
				Filing Date	26 May 2005
				First Named Inventor	Bulthuis et al.
				Group Art Unit	Not Assigned
				Examiner Name	Not Assigned
				Attorney Docket Number	GEML 4671-3

U.S. PATENT DOCUMENTS						
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
<del>           [Signature]            [Signature]            [Signature]            [Signature]            [Signature]            [Signature]            [Signature]            [Signature]            [Signature]            [Signature]            [Signature]            [Signature]            [Signature]            [Signature]            [Signature]            [Signature]            [Signature]            [Signature]            [Signature]         </del>	A1	2001/0051018	A1	Arai et al.	12-13-2001	385/24
	A2	5,044,715		Kawachi et al.	09-19-1991	385/42
	A3					
	A4					
	A5					
	A6					
	A7					
	A8					
	A9					
	A10					
	A11					
	A12					
	A13					
	A14					
	A15					
	A16					
	A17					
	A18					
	A19					
	A20					

FOREIGN PATENT DOCUMENTS								
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
<del>200</del>	B1		EP 0 382 461		Kawachi et al.	08-16-1990	602B 6/28	
<del>200</del>	B2		EP 0 610 973		Yamauchi et al.	08-17-1994	602B 6/28	
<del>200</del>	B3		JP 07281041		Shirata Tomoyuki et al.	10-27-1995	602B 6/22	
<del>200</del>	B4		WO 2004/017112	A1	Van der Vliet et al.	02-26-2004	602B 6/26	
	B5							
	B6							
	B7							
	B8							
	B9							
	B10							

Examiner Signature <i>[Signature]</i>	Date Considered 12/12/07
---------------------------------------	--------------------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0851-0031  
U. S. Patent and Trademark Office U. S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, persons are required to respond to a collection of information that contains a valid OMB control number.

Substitute for form 1449B/PTO			<b>Complete if Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			Application Number	GEML 4671-3	
			Filing Date	10/536,570	
			First Named Inventor	Bulthuis et al.	
			Group Art Unit	Not Assigned	
			Examiner Name	Not Assigned	
Sheet	2	of	2	Attorney Docket Number	26 May 2005

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
DP	C1	HASHIZUME Y ET AL. "Integrated polarisation beam splitter using waveguide birefringence dependence on waveguide core width" ELECTRONIS LETTERS, IEE STEVENAGE, GB, vol. 37, no. 25, 6 December 2001, pgs. 1517-1518, XP006017649 ISSN: 0013-5194 * sections "Design", "Experimental results"; figure 1	
DP	C2	LAI Q ET AL. "Tunable wavelength-selection switch and multiplexer/demultiplexer based on asymmetric silica-on-silicon Mach-Zehnder interferometer" ELECTRONICS LETTERS, IEE STEVENAGE, GB, vol. 34, no. 3, 5 Feb. 1998 (1998-02-05) pgs. 266-267, XP006009267 ISSN: 0013-5194	
DP	C3	BESSE P A ET AL. "Optical Bandwidth & Fabrication Tolerances of Multimode Interference Couplers" JOURNAL OF LIGHTWAVE TECHNOLOGY, IEEE, NY, US, vol. 12, no. 6, 1 June 1994 (1994-06-01) pgs. 1004-1009, XP000484218 ISSN: 0733-8724, sections II, III; fig. 1,3	
DP	C4	HONG J-K, KIM J-H, LEE S-S: "Low-power thermo-optic silica-on-silicon MZI switch using multimode interference couplers" SILICON-BASED & HYBRID OPTOELECTRONICS IV, SPIE PROCEEDINGS, vol. 4654, 28 March 2002 pgs 157-163, XP002277219	
DP	C5	SOLDANO L B ET AL: "Optical Multi-Mode Interference Devices Based on Self-Imaging: Principles & Applications" Journal of Lightwave Technology, IEEE, NY, US, vol. 13, no. 4, 1 April 1995, pgs. 615-627, XP000513578 ISSN: 0733-8724, sections IV-VI; fig. 4	
DP	C6	LEE CC ET AL: "2 X 2 Single-Mode Zero-Gap Directional-Coupler Thermo-Optic Waveguide Switch on Glass" Applied Optics, Optical Society of America, Washington, US, vol. 33, no. 30, 20 Oct. 1994, pgs. 7016-7022, XP000476203 ISSN: 0003-6935 section 2; fig. 4	
DP	C7	SOLDANO L B ET AL: "Large Optical Bandwidth of INGAASP/INP Multi-Mode Interference 3-DBcouplers" Proceedings European Conference on Integrated Optics with Technical Exhibition, 1993, pgs 1-4, XP000522450	

Examiner Signature	Daniel Fethoussel	Date Considered	12/12/07
--------------------	-------------------	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 808. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.